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Applicant(s): Jung, et al.

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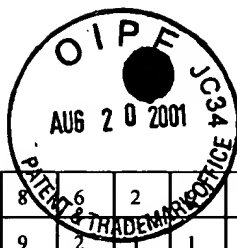
U.S. PATENT DOCUMENTS

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↓	4	1	8	4	1	7	5	01/80	Mullane, Jr.	356	237	02/09/77
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↓	4	6	1	6	9	3	3	10/86	Leveque, et al	356	416	-

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↓	5	1	6	6	7	5	5	11/92	Gat	356	419	
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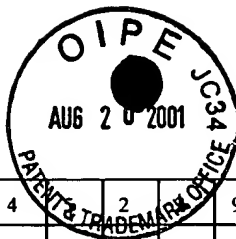


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RL	5	6	9	6	7	5	1	12/97	Juffinger	369	119	5/5/95
↓	5	7	4	2	0	6	0	3/98	Ashburn	250	370.09	



OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

PL	Aswell, Cecil J. et al., "A Monolithic Light-to-Frequency Converter with a Scalable Sensor Array", IEEE, 1994, pp. 122-123 and 158-159.
	Bangtson et al.; "The conversion of Chromascan designations to CIE tristimulus values"; Nov. 1982; pp 610-617 Vol. 48 No. 5, Journal of Prosthetic Dentistry
	Barghi et al.; "Effects of batch variation on shade of dental porcelain"; Nov. 1985; pp 625-627, Vol. 54 No. 5, Journal of Prosthetic Dentistry
	Council on Dental Materials, Instruments, and Equipment; "How to improve shade matching in the dental operator"; Feb. 1981; pp 209-210, Vol. 102; JADA
	Davison et al.; "Shade selection by color vision-defective dental personnel"; Jan. 1990; pp 97-101 Vol. 63 No. 1, Journal of Prosthetic Dentistry
	Demro, James C., R. Hartshome, P.A. Levine, L.M. Woody, "Design of Multispectral, Wedge Filter, Remote-Sensing Instrument incorporating a multi-port, thinned, CCD area array" SPIE Vol. 2480 p. 280.
	Dickerson; "Trilogy of Creating an Esthetic Smile"; Jul. 1996; pp 1-7, Vol. 1, Issue 3; Technical Update-A Publication of Micro Dental Laboratories
	Elerding, George T. John G. Thunen, Loren M. Woody "Wedge Imaging Spectrometer: Application to drug and pollution law enforcement" SPIE Vol. 1479 <i>Surveillance Technologies</i> , p. 380 (1991).
	Goldstein et al.; "Repeatability of a specially designed intraoral colorimeter"; Jun. 1993; pp 616-619, Vol. 69 No. 6, Journal of Prosthetic Dentistry
	Goodkind et al.; "A comparison of Chromascan and spectrophotometric color measurement of 100 natural teeth"; Jan. 1985; pp 105-109, Vol. 53 No. 1, Journal of Prosthetic Dentistry
	Ishikawa et al.; "Trial Manufacture of Photoelectric Colorimeter Using Optical Fibers"; Nov. 1969; pp 191-197, Vol. 10, No. 4, Bull. Tokyo dent. Coll.
	Johnston et al.; "The Color Accuracy of the Kubelka-Munk Theory for Various Colorants in Maxillofacial Prosthetic Material"; Sep. 1987; pp 1438-1444, Vol. 66, No. 9; J. Dent. Res.
	Johnston et al.; "Assessment of Appearance Match by Visual Observation and Clinical Colorimetry"; May 1989; pp 819-822, Vol. 68, No. 5; J. Dent. Res.
	Kato et al; "The Current State of Porcelain Shades: A Discussion"; Oct. 1984; pp 559-571, Vol. 8, No. 9; Quintessence Of Dental Technology
	Mika, Aram M., "Linear-Wedge Spectrometer" SPIE Vol. 1298 <i>Imaging Spectroscopy of the Terrestrial Environment</i> , p. 127 (1990).
	Miller; "Organizing color in dentistry"; Dec. 1987; pp 26E-40E, Special Issue; JADA
	Miller et al; "Shade selection and laboratory communication"; May 1993; pp 305-309, Vol. 24, No. 5; Quintessence International
	O'Brien et al.; "Coverage Errors of Two Shade Guides"; Jan/Feb. 1991; pp 45-50, Vol. 4, No. 1; The International Journal of Prosthodontics
	O'Brien et al.; "A New, Small-color-difference Equation for Dental Shades"; Nov. 1990; pp 1762-1764, Vol. 69, No. 11; J. Dent. Res.
	O'Keefe et al.; "Color Shade and Matching: The Weak Link in Esthetic Dentistry"; Feb. 1990; pp 116-120, Vol. XI, No. 2, Compend Contin Educ Dent
	Pensler; "A New Approach to Shade Selection"; Sep. 1991; pp 668-675, Vol. XII, No. 9, Compend Contin Educ Dent
	Preston et al.; "Light and Lighting in the Dental Office"; Jul. 1978; pp 431-451, Vol. 22, No. 3; Dental Clinics of North America
	Preston; "Current status of shade selection and color matching"; Jan. 1985; pp 47-58, Vol. 16, No. 1; Quintessence International
	Rosenstiel et al.; "The effects of manipulative variables on the color of ceramic metal restorations"; Sep. 1987; pp 297-303, Vol. 60 No. 3, Journal of Prosthetic Dentistry
	Rugh et al.; "The Relationship Between Elastomer Opacity, Colorimeter Beam Size, and Measured Colorimetric Response"; Nov/Dec 1991; pp 569-576, Vol. 4, No. 6; The International Journal of Prosthodontics
	Ryther et al.; "Colorimetric Evaluation of Shade Guide Variability"; 1993; pg. 215; J. Dent. Res. 72 (IADR Abstracts) Special Issue
	Schwabacher et al.; "Three-dimensional color coordinates of natural teeth compared with three shade guides"; Oct. 1990; pp 425-431, Vol. 64 No. 4, Journal of Prosthetic Dentistry
	Seghi et al.; "Spectrophotometric analysis of color differences between porcelain systems"; Jul. 1986; pp 35-40, Vol. 56 No. 1, Journal of Prosthetic Dentistry
PL	Seghi et al.; "Visual and Instrumental Colorimetric Assessments of Small Color Differences on Translucent Dental Porcelain"; Dec. 1989; pp 1760-



RL	5	7	4	2	9	4/98	Jung et al.	356	73	1/2/96	
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	5	8	2	2	4	7	4	10/98	Hara	385	24
	5	8	5	0	1	9	5	12/98	Berlien, Jr. et al.	341	137
	5	8	5	0	3	0	1	12/98	Mizuochi et al.	359	124
	5	8	8	0	8	2	6	3/99	Jung et al.	433	29
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	5	9	2	4	9	8	1	7/99	Rothfritz et al.	600	306
	5	9	6	1	3	2	4	10/99	Lehmann	433	26
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FOREIGN PATENT DOCUMENTS

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	8	6	0	3	2	9	2	6/86	Di Matta (PCT)	433	203.1		
RL	54	1	0	3	0	5	5	8/79	Nosu (Japan)	356	416		



PL	1764; Vol. 68, No. 12; J. Dent. Res.
	Seghi et al.; "Performance Assessment of Colorimetric Devices on Dental Porcelains"; Dec. 1989; pp 1755-1759, Vol. 69, No. 11; J. Dent. Res.
	Seghi; "Effects of Instrument-measuring Geometry on Colorimetric Assessments of Dental Porcelains"; May. 1990; pp 1180-1183, Vol. 69, No. 5; J. Dent. Res.
	Sorensen et al.; "Improved color matching of metal-ceramic restorations. Part I: A systematic method for shade determination"; Aug. 1987; pp 133-139, Vol. 58, No. 2, Journal of Prosthetic Dentistry
	Sorensen et al.; "Improved color matching of metal-ceramic restorations. Part II: Procedures for visual communication"; Dec. 1987; pp 669-677, Vol. 58, No. 6, Journal of Prosthetic Dentistry
	Sproul; "Color matching in dentistry. Part 1. The three-dimensional nature of color"; Apr. 1973; pp 416-424, Vol. 29, No. 4; J. Prosthet. Dent.
	Sproul; "Color matching in dentistry. Part 1. Color control"; Feb. 1974; pp 146-154, Vol. 31, No. 2; J. Prosthet. Dent.
	Sproul; "Color matching in dentistry. Part 2. Practical applications of the organization of color"; May 1973; pp 556-566, Vol. 29, No. 5; J. Prosthet. Dent.
	Swift et al.; "Colormetric Evaluation of Vita Shade Resin Composites"; 1994; pp 356-361, Vol. 7, No. 4; The International Journal of Prosthodontics
PL	van der Burgt et al.; "A comparison of new and conventional methods for quantification of tooth color"; Feb. 1990; pp 155-162, Vol. 63 No. 2, Journal of Prosthetic Dentistry
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